

Students' engagement in school, achievement goals and grade level: A literature review

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Abstract

Framework: Students' Engagement in School (SES) is regarded in the literature as a valuable cutting-edge construct, although few empirical studies address its relationship with personal variables, such as achievement goals, attending, for instance, to the students' grade levels. **Purpose:** The present research sought to

examine studies on the relation between achievement goals and school variables as students' engagement in school, over adolescence. **Method:** In order to describe the state of art of student's engagement in school and achievement goals and grade level, we prepared a narrative review. **Conclusions:** The studies revised highlight the role of achievement goals as important for a student's engagement in school; however, there is the need to extend research in this area by considering potential personal and school-related mediator variables. It is suggested a special support for those students who, exhibiting an academic difficulties pathway, also lack academic goals and learning strategies, resulting in low engagement in school and, therefore, low achievement and a higher probability of dropping out. There is the need to extend research in this area by analyzing the variables *achievement goals* and *student's engagement in school*, along with the relations between these variables. An intervention to support students little achievement goals, in studies of quasi-experimental nature, is also inferred from the studies revised. The activation of appropriate achievement goals emerges as a way to promote students' engagement in school and, thus, as a strategy of great importance to be considered in the education of teachers and psychologists. **Keywords:** student's engagement in school, achievement goals, grade level, teacher education, psychologist education, literature review

1. Introduction

The relationship between motivation and the students' learning goals has drawn the attention of a few authors. The goal orientation adopted influences cognitive and self-regulatory strategies used in learning situations (Anderman & Patrick, 2012) and, necessarily, students' academic performance. For instance, Roeser, Midgley and Urdan (1996), have suggested that *mastery goals* (focused on effort and knowledge acquisition, contrary to performance goals, related to knowledge demonstration) are related to positive affection toward school, intrinsic motivation and self-concept. A mastery orientation also appears related to several positive academic behaviours, such as asking for help (Ryan & Pintrich, 1997) or the absence of disruptive behaviours within classroom (Ryan & Patrick, 2001; Veiga, 2012, 2013).

A construct which, in this context, has been presenting an important role, is *students' engagement in school* (Mehta, Cornell, Fan, & Gregory, 2013). Having not yet a fully consensual definition, students' engagement in school can be characterized as a

multidimensional construct that includes students' thoughts, feelings and behaviors (Fredericks, Blumenfeld, & Paris, 2004; Furlong et al., 2003, cited in Furlong & Christenson, 2008), or as the experience of centripetal connection of the student to school (Veiga, 2012, 2013).

In order to describe the state of art of Student's engagement in school and achievement goals and grade level, we prepared a narrative review. The method applied entailed systematic searching, reviewing, and writing to bring together key themes and findings of research in this field. We searched recent articles in scientific data bases such as SCIELO, LILACS, EBSCO Host (including: Academic Search Complete, Education Source, ERIC, PsycARTICLES, PsycINFO, Psychology and Behavioral Sciences Collection, PsycBOOKS, and PsycTESTS), besides several Portals, for example Science Direct or the Scientific Open Access Repository of Portugal – RCAAP. Handbooks and PhD Thesis were also regarded. Research used controlled language and keywords were verified in a Thesaurus. Our study goals were considered in the articles' selection process, and several criteria were applied (full document available; articles written in English). Reviewing the available literature was focused on identifying and analyzing cutting-edge core themes and their importance, as well as research lines, followed and suggested.

The following section introduces the conceptualization and assessment of achievement goals. The succeeding parts of this document will deal with the relation between achievement goals and students engagement in school, and attend to the role of students' grade level in these relations.

2. Achievement goals: conceptualization and assessment

In the context of motivation theories, the self-determination perspective assumes that the student holds motivational resources that allow him to engage, constructively, in the learning environment. Ford (1992) suggested that individuals are self-organized and driven by goals, even though they constitute only part of motivation. Goals are defined by this author as desired final conditions that can be achieved through behavior regulation (behavioral, affective and biochemistry).

A viewpoint that has been suggesting a few studies relates to the students' goal orientation toward learning (Dweck, 1999; Elliot & Church, 1997; Nicholls et al., 1990). Achievement goal theories highlight two main orientations: mastery orientation,

focused on developing skills and task excellence/mastery; and performance orientation, based on the demonstration of competence in face of others. These goals are associated with different behaviors: the first are linked with the students' persistence in face of obstacles, with challenge seeking, and with intrinsic motivation; the second, with a minimal resistance to failure, challenges avoidance and with low intrinsic motivation (Ames, 1992). A third possibility was added by Elliot and Church (1997), by considering that performance goals may be differentiated in terms of performance-approach goals, focused on the search for positive competence appraisals; or performance-avoidance: avoiding negative performance appraisals.

Other taxonomies may be found in the literature, showing a similar content: Maehr (1984) has defined task goals (related to students' engagement in a task, and with self-perceptions of ability) and ego-related goals (related to self-performance in reference to others); Nicholls et al. (1990) considered *ego-involved goals* – when the students seek favorable evaluations of their competence, and *task-involved goals* – focused on mastering tasks and increasing performance; Dweck (1999) distinguished *performance* and *learning goals*; Ames (1992) suggested *performance* and *mastery goals*; whereas Ford (1992) proposed a vast taxonomy of goals, which may be arranged into *within-person goals* and *person-environment goals*.

Wentzel (1994, 1998) related social support and classroom competence, suggesting the importance of social context-related goals on students' school performance; the operationalization of the valued goals, both personally and socially, seems to mediate the relationships with peers and teachers, and school performance. The realization of social support should influence the students beliefs about themselves, relating to academic achievement through the engagement, in the classroom, in valued social and academic conducts (such as the adoption of good behaviors or persistence when doing tasks).

Other authors (Elliot & McGregor, 2001) support a four component approach, adding mastery-avoidance goals (which have subtended to avoid making mistakes or anything wrong) to the three elements typology. Most studies consider a dichotomous (Nicholls et al. 1990; Taing et al., 2013) or trichotomous (Church, Elliot, & Gable, 2001; Midgley et al., 1998) perspective.

Among achievement goals measurement instruments, the most common are the *Patterns of Adaptive Learning Survey – PALS* (Midgley et al. 2000) and the *Achievement Goal Questionnaire – AGQ* (Elliot & McGregor, 2001), both having their

factor structure and reliability well-documented (e.g., Midgley et al., 2000; Muis & Winne, 2012). PALS, for instance, may be applied to both general and domain-specific achievement, although internal consistency appears higher in the second version, when compared to the general measure.

- *Patterns of Adaptive Learning Survey - PALS* (Midgley et al. 2000). This instrument is available online (<http://www.umich.edu/~pals/manuals.html>), and includes students scales (personal achievement goal orientations; perception of teacher's goals; perception of classroom goal structure; academic-related perceptions beliefs, and strategies; perceptions of parents, home life, and neighborhood) and also teachers scales (perceptions of the school goal structure; goal-related approaches to instruction; and personal teaching efficacy). Answers are given in a Likert-type five point scale anchored at 1 = Not at all true, 3 = Somewhat true, and 5 = Very true. Items on the teacher scales are anchored at 1 = Strongly disagree, 3 = Somewhat agree, and 5 = Strongly agree. The scales correspond to a trichotomous framework for achievement goals (mastery, performance-approach and performance-avoidance goals). Original and revised student subscales (more appropriate for current conceptualizations of goals) are available. Studies focused, typically, middle and high school students (e.g., Middleton & Midgley, 1997; Midgley, Kaplan, Middleton, Maehr, Urdan et al., 1998), however, 4th grade and university students have also been considered (Ross et al., 2002). At the elementary level, items were phrased in terms of general class or schoolwork; at the middle and high school level, items have been adapted to measure domain-specific goals and perceptions (e.g., maths). Gonçalves, Lemos and Rodrigues (2008) adapted this instrument to Portugal, using a sample of 484 students from the 9th grade; Bastos and Dias (2010) studied younger students.

- *Achievement Goal Questionnaire - AGQ* (Elliot & McGregor, 2001). Comprises several versions, corresponding to a trichotomous framework (Elliot & Church, 1997): a mastery goal, a performance-approach goal, and a performance-avoidance goal; to a 2x2 framework (Elliot & McGregor, 2001), which divides goals into a mastery-performance dichotomy plus an approach-avoidance dichotomy, adding a fourth goal orientation, mastery-avoidance. A revised version for the 2x2 framework can be found in the work of Elliot and Murayama (2008), in which items contain common stems intended to emphasize a goal focus (goal, aim, strive) and do not enclose affective content (Elliot & Murayama, 2008). Moreover, a 3x2 framework has been proposed (Elliot, Murayama, & Pekrun, 2011) in which the separate task and interpersonal

components of mastery goals are considered separately: task, self and performance goals, along with approach-avoidance dimensions.

Besides global instruments, there may be found some domain-specific orientation measures, originated from the assumption that goal orientation is domain specific (Chiu, Hong, & Dweck, 1994; Dweck & Leggett, 1988), that is, an individual may hold a mastery goal orientation in the academic domain but a performance goal orientation in the work domain (Vandewalle, 1997). Some examples of this type of measure, that may be applied across domains, are *Task and Ego Orientation in Sport Questionnaire* (Duda & Nicholls, 1992); *Approach – Avoidance Achievement Goals Questionnaire* (Elliot & Church, 1997); *General Learning and Performance Goal Orientation* (Button, Matheu, & Zajac, 1996); or the *Physical Education (PE) version of the Self-Regulation Questionnaire* (Goudas, Biddle, & Fox, 1994).

The next section concerns the relationship between achievement goals and students' engagement in school.

3. Achievement goals and students engagement in school

The relationship between achievement goals and academic results has been object of specific analyses. Studies sought to analyze the effects of adopting each of the achievement goals on students' behavior and academic outcomes, based on the assumption that the adopted orientation could have impact in the engagement level, since goals influence the cognitive and self-regulatory strategies employed in learning situations (Anderman & Patrick, 2012), what occurs through two elements: competence perception (self-efficacy) and instrumentality perception.

Research shows that, in general, students who perceive themselves as effective in learning (Schunk & Pajares, 2005) tend to be competent and engaged, to set goals, to use learning strategies, to monitor and evaluate their work progress, and to create support environments. Students with a high self-efficacy, compared to those with low self-efficacy, are more likely to outline success goals, to face challenging tasks, to be persistent and to adopt strategies to respond to challenges, with a positive impact in engagement and academic performance (Bandura 1997; Zimmermann & Schunk, 2007).

More specifically, Roeser, Midgley and Urdan (1996) have suggested that mastery goals are related to positive affect toward school, intrinsic motivation and high self-concept. Walker, Greene and Mansell (2006) show that self-efficacy, intrinsic motivation and academic identification each contributed uniquely to the prediction

of meaningful cognitive engagement. The establishment of achievement goals contributed to the prediction of school performance (Steinmayr & Spinath, 2009). Mastery orientation appears associated with positive academic behaviors, such as asking for help (Ryan & Pintrich, 1997), and the absence of disruptive behaviors in the classroom (Ryan & Patrick, 2001; Veiga, 2012; Veiga, 2013; Veiga et al., 2013).

Several studies (Church, Elliot, & Gable, 2001; Roeser, Midgley, & Urdan, 1996) suggest that students perceive their classroom structures as mastery or performance oriented – being teachers' practices the carrier of this perception – , being their personal goals positively associated with the corresponding structure. Performance-oriented structures have impact on engagement because they influence the students' capacity to succeed in school-related tasks (Roeser, Eccles, & Sameroff, 2000), by encouraging social comparison within the classroom, with consequences on self-efficacy and engagement (Schunk & Mullen, 2012); on the other hand, a mastery orientation will allow the student to experience success (Linnenbrink & Pintrich, 2002), by promoting the use of self-regulatory strategies and students' self-confidence (Pintrich, 2000).

Studies on future oriented motivation indicate that those students who relate school subjects with the occupation they aspire to have, show better cognitive skills and a higher engagement in tasks and learning (Shell & Husman, 2001). Thus, the subjective value assigned to the task influences goals orientation (Miller & Brickman, 2004) and, therefore, students' engagement in school. In fact, the possible relation between achievement goals and time explains why the students' grade level is considered in more detail in the following section.

4. Achievement goals and grade level

Self-competence feelings tend to decrease as students' progress in schooling (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Wigfield & Eccles, 2000), similarly to what happens with students' engagement in school – due to the increase in competition (Gottfried, Fleming, & Gottfried, 2001), less dependence of teachers, and the negative impact of cycle transitions (Schunk & Meece, 2006). However, the longitudinal studies on how students' goals vary throughout grade levels, are still scarce.

Literature focuses how students' perceptions, about their classroom structures,

have impact in later points in time, both in task engagement and academic performance (Roeser & Eccles, 1998; Urdan, 2004). The impact of each three classroom orientations (mastery, performance and a combination of these two) was studied by Linnenbrink (2005), throughout five weeks, in 5th and 6th grade students; best results were found in students with a combined orientation. Hughes, Wu and West (2010) examined the existence of teachers' practices supported by performance goals, in 2nd to 5th grade at-risk students; the authors found an increase in this type of teachers' practices and, simultaneously, a decrease in students' engagement, throughout the schooling years.

O'Keefe, Ben-Eliyahu and Linnenbrink-Garcia (2012) studied the changes in students' goal orientations, as well as two contingencies of self-worth (outperforming others and others' approval) as a function of participating in a mastery-structured academic program for high-ability adolescents, from 8th to 10th grade. These contingencies were assumed to be related to a performance orientation, nevertheless, were viewed as alterable, according to the learning context orientation. The authors found an increase in mastery orientation, during the summer program, which remained high after students returned to their home learning environment. Performance-approach and performance-avoidance goal orientations decreased during the summer program, then, returned to previous levels when evaluated six months later. The changes in the contingency of self-worth based on outperforming others positively co-varied with the changes in both performance goal orientations; conversely, changes in self-worth contingent on others' approval did not. The authors highlight the high susceptibility of goal orientations to situational changes in the classroom environment.

Taing et al. (2013) studied university students' learning goal orientation, goal setting, and performance over 16 weeks. Learning goal orientation related to more complex goal setting, as well as to a higher performance throughout time. The relationship between learning goal orientation and performance appeared mediated by goal setting.

5. Final considerations

Literature highlights the role of the goals adopted by the students on school-tasks accomplishment motivation. Studies associate mastery goals orientation with positive school behaviors, such as the use of self-regulatory strategies (Pintrich, 2000) or self-confidence, and also with the absence of disruptive behaviors in classroom (Ryan & Patrick, 2001; Veiga, 2012; Veiga et al., 2013). In contrast, performance orientation goals appear as obstacles to learning, since they decrease the confidence in the ability to be successful in school-related tasks (Roeser, Eccles, & Sameroff, 2000), by encouraging social comparison within classroom, decreasing self-efficacy and, consequently, motivation and engagement in school (Schunk & Mullen, 2012).

Students' self-competence feelings change as they progress in schooling (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Wigfield & Eccles, 2000), alongside with a decrease in motivation and engagement (Klem & Connell, 2004). One of the most referred aspects, in literature, deals with students' perceptions about their classroom goal structures. The teacher holds an important role by assuming a mastery or performance oriented teaching, which may influence the students' performance, through goal setting. The teachers' practices have been related to mastery goals and classroom efficacy, such as: encouraging choices; promoting autonomous learning; valuing recognition through rewards; making appraisals focused on effort; directing progress evaluation; promoting a sense of group belonging; allowing task time variations, according to students' needs (Veiga, et al., 2012); teaching in such way that all students understand the lessons; using several learning instruments; controlling classroom disruption; and encouraging the expression of opinions (Zyngier, 2007).

Ames (1992) has examined learning structures and identified six contextual features to attend, considering their impact on students' orientations: nature of the task, teachers' authority, the reward system, students' organization in class, learning time management, and assessment. These learning environmental factors appear as relevant in students' achievement goals, and have been related to academic results (Urda 2010) and students' engagement in school, being worthy of further empirical studies, supported by well validated measures. Also, adopting a longitudinal perspective of how students' goals vary over schooling appears as fundamental for understanding and encouraging students' academic success.

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